

# A New Combination in *Eriochrysis* (Poaceae: Andropogoneae)

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**ABSTRACT.** The new combination *Eriochrysis filiformis* (Hackel) Filgueiras is made based on *Saccharum filiforme* Hackel. A full description of the species is given based on recent collections.

*Leptosaccharum* was originally described as a monotypic subgenus of *Saccharum* L. by Hackel (1889) based on a collection of *Balansa* (no. 231) taken at Caaguazu, Paraguay. This subgenus later became the basis for the establishment of the genus *Leptosaccharum* by Camus (1923), with a single species, *L. filiforme* (Hackel) Camus. While proposing his new genus, Camus (1923) made a mistake in citing the basionym, i.e., he cited "*Andropogon filiforme* Hack." This "error" was later corrected (Camus, 1956), i.e., *Saccharum filiforme* Hackel. The genus remained little known for several decades. This was perhaps principally due to the fact that its only species is rarely collected and therefore poorly represented in herbarium collections.

It is intriguing to realize that most authors who dealt with this genus failed to see its relationship with the Andropogoneae (Camus, 1923, 1956; Smith & Wasshausen, 1977, 1981; Nicora & Rúgolo, 1987); instead they placed it in the Paniceae. Watson and Dallwitz (1992) are an exception for they placed the genus in the Andropogoneae. It was only in 1986 that Clayton and Renvoize reduced *Leptosaccharum* to a synonym of *Eriochrysis* Beauv., although without offering any evidence to support their decision.

Careful examination of recent collections of this species proved that indeed it belongs in *Eriochrysis*. The plants are perennials, with pilose nodes, the inflorescence is a reduced panicle, covered with rufous hairs, the rachis is fragile, the pedicels display unequal length, and the spikelets are paired, one bisexual and the other feminine. Both spikelets are similar in size and shape, although the feminine is slightly smaller. The lower glume is chartaceous, fringed with rufous hairs at the margins. These are all diagnostic features of *Eriochrysis*. In Watson and Dallwitz (1992) *Leptosaccharum* is considered both as distinct (p. 377) and as a synonym of *Eriochrysis* (p. 513). These authors presented a detailed anatomical description of the genus but misinterpreted

its spikelet organization when they described the spikelets as solitary and only hermaphroditic and the lower glume as missing. None of the material examined by me (an isotype, plus nine collections from Brazil) presented any of these gross morphological features. Based on all the available evidence, the formal transfer of *Leptosaccharum filiforme* to *Eriochrysis* is made herein.

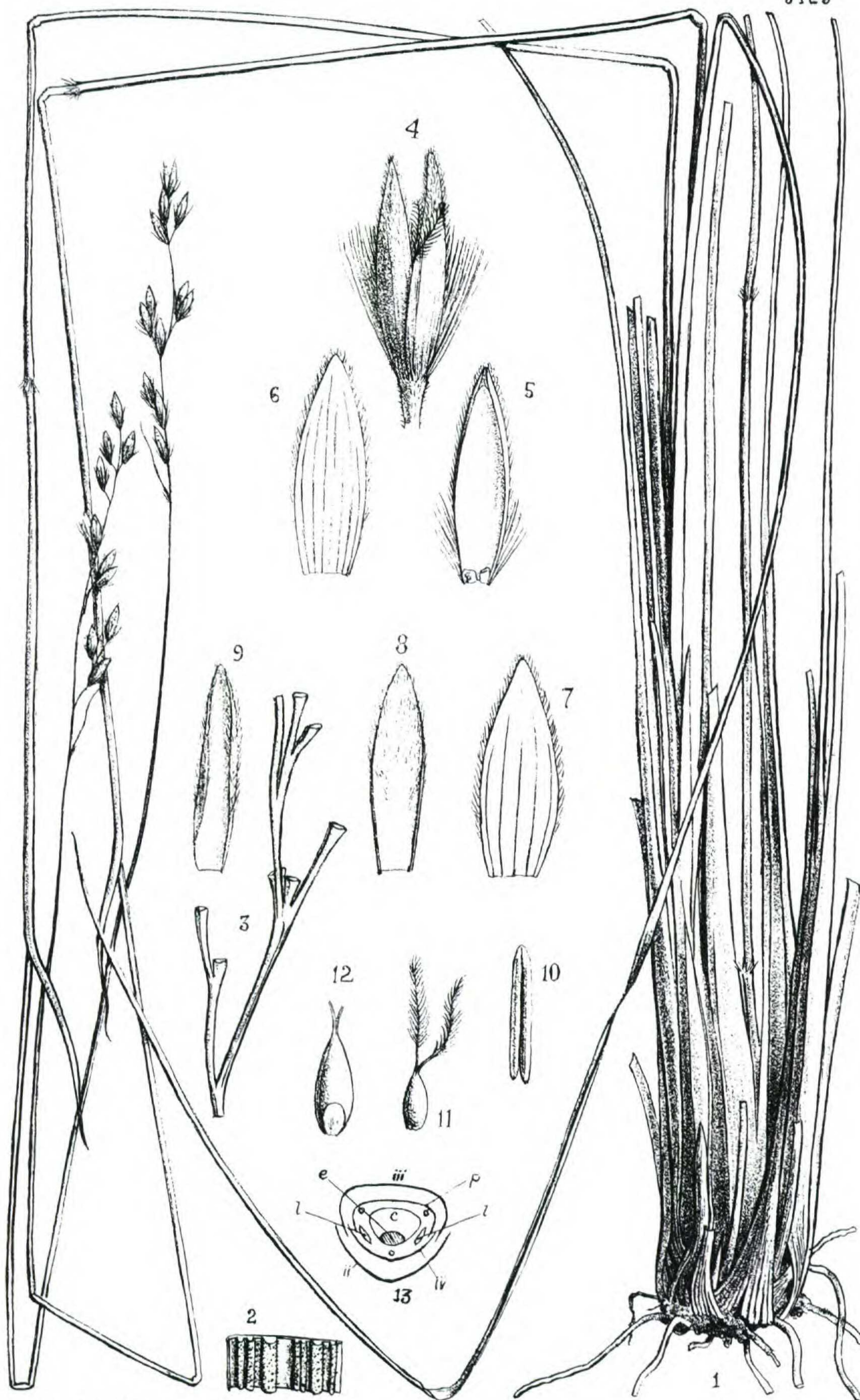
***Eriochrysis filiformis*** (Hackel) Filgueiras, comb. nov. Basionym: *Saccharum filiforme* Hackel, in A. L. P. P. de Candolle & A. C. P. de Candolle, Monogr. phan. 6: 127. 1889. TYPE. Paraguay. "Caaguaza" [Caaguazu]: "in pratis uliginosis," s.a., *Balansa* 231 (holotype, P not seen; isotype, US).

Since no recent description of this species is available anywhere, it seems appropriate to provide a detailed description here.

Densely caespitose perennials; rhizomes short, knotty. Culms 2–4-noded, erect, unbranched in their vegetative portions, 30–55 cm long; internodes hollow, glabrous, stramineous to purplish; nodes densely pilose. Leaves mostly basal; sheaths rounded at the back, strongly striate, glabrous, both margins glabrous; auricles absent; ligule membranous, hyaline, 1–1.5 mm long, pilose at the apex; hairs at the apex of the ligule pale, 2–3 mm long; blades flat to inrolled upon drying, linear to setaceous, 10–45 cm long and 1–3 mm wide, smooth and glabrous on the abaxial side, glabrescent and rough on the adaxial side, apex acute to subpungent. Inflorescence a contracted, terminal, rufous panicle, 4–7 cm long and 0.5–0.8 cm wide; inflorescence rachis easily breaking at maturity, pilose, the hairs rufous. Pedicels of unequal length, short and long, the short 2–3 mm long, the long one 4–6 mm long. Spikelets paired, similar, elliptical; the short-pedicelled spikelet 4.5–5.5 mm long, bisexual, with a ring of rufous hairs at the base, the hairs 2–4 mm long; lower glume 4–4.8 mm long, chartaceous, glabrescent to pilose, 5–7-nerved, the nerves prominent; upper glume similar to the lower one, 3.5–4 mm long, chartaceous, glabrescent to pilose, 5–7-nerved, the nerves prominent; lemma hyaline, 3–3.3 mm long, shortly pilose, margins cil-



3125



O.S. anal G.A del. et lith.

Figure 1. *Eriochrysis filiformis* (Hackel) Filgueiras, from Stapf, 1927: tab. 3125. —1. Habit. —2. Part of leaf blade, adaxial side,  $\times 10$ . —3. Part of an inflorescence, showing the naked pedicels (the spikelets have been removed and the indumentum omitted),  $\times 3$ . —4. Spikelet, frontal view. —5. Upper glume, lemma and lodicules. —6. Lower glume. —7. Upper glume. —8. Lemma. —9. Palea. —10. Anther. —11. Gynoecium. —12. Caryopsis. —13. Diagram of a spikelet: ii: Lower glume; iii: upper glume; iv: lemma; p- palea; l-lodicules; c-caryopsis; e-embryo. The spikelet parts illustrated have been reinterpreted by the author to be consistent with the text.



iate; palea similar to lemma, hyaline, 2.8–3.2 mm long; stamens 3; anthers purplish, 3–3.3 mm long; stigmas 2, separate, purple. Caryopsis not seen. Long-pedicelled spikelet 4–4.5 mm long, feminine (rarely bisexual), with a ring of rufous hairs at the base, the hairs 2–4 mm long; lower glume 3–3.5 mm long, chartaceous, glabrescent to pilose, 5–7-nerved, the nerves prominent; upper glume 2.8–3.2 mm long, membranous, glabrescent to pilose, 3–5-nerved, the nerves prominent; lemma hyaline, 2.5–3 mm long, shortly pilose, the margins ciliate; palea similar to lemma, 1.8–2.2 mm long, hyaline; stamens absent; stigmas 2, separate, purple. Caryopsis not seen.

*Iconography.* Stapf (1927).

*Distribution.* Brazil, Paraguay.

*Eriochrysis filiformis* is apparently rare in nature. Even when in bloom the plants are difficult to spot in the field because they grow in the densest parts of the permanently wet campos, mixed with many other grass species of similar habit and appearance. They usually grow in dense, widely scattered clumps. Populations in the Distrito Federal of Brazil grow in extremely boggy places. To reach the plants the collector has to walk across shaky ground almost as dangerous as quicksand. The plants apparently bloom only after having been burnt. All the collections examined displayed some sign of having been previously burnt. Since the typical habitat of this species, wet campo, is seldom subjected to seasonal fires, these plants rarely bloom.

*Eriochrysis* is related to the *Erianthus* Michaux/*Saccharum* groups. An account of the species of *Eriochrysis* is in preparation by the present author.

*Specimens examined.* BRAZIL. **Bahia:** Correntina,

Fazenda Jatobá, 8 Aug. 1992, M. A. Silva, T. S. Filgueiras & A. L. Brochado 1589 (IBGE, MO). **Distrito Federal:** APA do Rio São Bartolomeu, Córrego Mato Grande, 9 Sep. 1985, Mendonça & Ribeiro 518 (BLA, CEN, IBGE, RB, SP, SPF, UEC); Cabeça de Veado [Jardim Botânico], 15 Sep. 1980, Filgueiras 754 (IBGE, MAC); brejo próximo à Papuda, 10 Sep. 1985, Filgueiras 1183 (IBGE). **Goiás:** entre Rio Torto et Paranan, s.a., Glaziov 22444 (US, fragment). **Paraná:** Jaguariahyva [Jaguariaíva], 17 Feb. 1914, Dusén 16051 (US); Ponta Grossa, 30 Jan. 1946, Swallen 8366 (US). **São Paulo:** São José dos Campos, 28 Nov. 1961, Mimura 142 (IBGE, SP); São Paulo, Avenida Paulista, 5 Nov. 1906, Usteri s.n. (SP 9575).

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